

**ABSTRACT OF THE DISCLOSURE**

A device for engine exhaust extraction improves engine performance and efficiency. The device includes outer and inner tubes sharing a central axis. The inner tube is held in place by supports connected between the inner tube and the outer tube, which supports have a fan-like orientation. Helically oriented vanes reside on an outer surface of the inner tube, which vanes extend outward. An inlet flow separates into an outer flow between the inner tube and the outer tube and an inner flow inside the inner tube. The fanblade-like supports and helically oriented vanes cause the outer flow to rotate about the central axis of the device. The flow recombine near the device outlet.